



# GEOTHERMAL ENERGY ASSOCIATION

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November 20, 2009

Mr. Gary Collord  
California Air Resources Board (CARB)  
Energy Division  
P.O. Box 2815  
Sacramento, CA 95812-2815

Dear Mr. Collord:

The Geothermal Energy Association (GEA), which includes all of the geothermal energy companies that operate in California, submits the following comments on your *"Proposed Concept Outline for the California Renewable Electricity Standard"* (RES) released for public review on October 30, 2009. GEA would like to thank you for the excellent public workshop on the RES regulatory effort, and for the opportunity to comment on the Concept Outline.

GEA has the following comments and concerns:

- 1. GEA would like to reiterate our concern that the top priority of CARB's RES proceeding should be to harmonize the new 33% regulatory standards with the state's current requirements for the "renewable portfolio standard" (RPS).**

According to 2008 data, the geothermal industry is the leading provider of GWh/year of renewable energy in California. As you know, the state's retail electricity providers have been struggling to meet the current 20% by 2010 RPS standard. As the California Public Utilities Commission noted in their recent RPS Quarterly Report Q4 2009, California is really looking at a 2013-2014 compliance timeframe for the 20% goal. As the same report notes, "on an aggregated basis, 13% of IOU electric retail sales were served by RPS eligible resources in 2008."

Before CARB creates any new RES procurement and compliance requirements for the 2014-2020 timeframe, the Board needs to carefully focus on how your actions can not only "build upon and complement" the state's RPS Program, but actually enhance and expedite the current program to speed progress towards the 20% goal. As developers of renewable energy projects, our major concern is that the state set clear procurement targets for load-serving entities and that we focus on the Governor's Executive S-21-09 Order mandate to:

*"establish the highest priority for those resources that provide the greatest environmental benefits with the least environmental costs and impacts on public health that can be developed most quickly and that support reliable, efficient, cost-effective electricity system operations including resources and facilities located throughout the Western Interconnection."*

## 2. Responses to Part II -- Section by Section Discussion of the Renewable Electricity Standard

- **Applicability of the Renewable Electricity Standard**

GEA agrees with CARB that the RES should apply to all California electrical corporations, electric service providers, community choice aggregators, electrical cooperatives, and local publicly owned electric utilities as “regulated parties.”

- **RES Eligible Resources**

GEA strongly agrees with CARB that the current statutory definition of “*eligible renewable resources or fuels currently eligible under the Renewable Portfolio Standard (RPS) program*” should be adopted through the RES regulation. Proposals to amend the current RPS eligibility definition are complications that CARB must avoid in the RES regulation adoption process if it is to achieve its goal of developing an approach that fully utilizes and complements the existing RPS program.

- **Geographic Eligibility**

The Concept Outline states that “*staff seeks comments on the potential impact of modifying the deliverability requirements for out-of-state generating resources.*” Staff is proposing that “*Facilities located in- or out-of-state, and connected to the Western Electricity Coordinating Council (WECC) transmission system, would be eligible for the RES.*” GEA generally agrees with this concept, with the caveat that the priority should be actual delivery of RPS/RES compliant power to California.

As Governor Schwarzenegger articulated in his Executive Order, California is not likely to meet RPS/RES targets solely through the development of in-state renewable energy resources. There are too many permitting, land-use, cost and transmission constraints in California to expect that we can build enough capacity in the next 11 years to reach a 33% RES goal. This reality will necessitate that we look at creative and cost effective ways to bolster in-state renewable energy development, and include delivery of out of state renewable energy to the California market. All of this will require that we create additional incentives and expedited permitting and appeal processes for renewable energy projects in California. As noted below, GEA would like to make this a further discussion topic with CARB.

- **Purchase and Use of Renewable Energy Credits (RECs)**

CARB is proposing that “*power purchase agreements for energy and RECs, REC-only transactions, and generation owned by regulated parties would be eligible to satisfy the RES.*” As it relates to the geographic eligibility question and REC markets, GEA is generally supportive of the concept of a procurement hierarchy that promotes the following objectives:

- First priority: development of new, in-state renewable energy projects
- Second priority: out of state delivered power with associated REC’s
- Third priority: purchased of WECC generation with unbundled REC’s

The importance of the procurement hierarchy also helps alleviate the problems of leakage, and the de facto shifting of high GHG emitting energy source purchases to other out of state markets. Another method of ensuring that California not become too reliant on solely purchasing out of state unbundled REC’s to satisfy RES requirements is

to limit the quantity or percentage of REC's that can be purchased by regulated parties to satisfy RES targets. For instance, regulated parties could be limited to only claiming 20% of a RES target through the acquisition of unbundled REC's. Another concept would be that purchase of unbundled out of state RECs should be limited to making up for shortfall purchases in connection with Power Sales Agreements that otherwise are in compliance with California requirements.

- **RES Compliance Options and Metrics**

GEA supports the proposed option to measure compliance based on the current RPS metric of MWh of eligible renewable generation obtained by regulated parties. Although the Concept Outline suggests an intriguing idea of developing a "compliance credit" whereby MWh of eligible generation would be converted to tons of GHG reductions to determine a regulated party's compliance, GEA believes that CARB needs to favor on the side of simplicity and certainty.

CARB has asked for additional comments and feedback "*on the feasibility of using prescribed GHG factors for various resource types.*" In addition, CARB asks for feedback in Attachment 3 on the topic of "*RES Generator GHG Factors.*" GEA has no doubt that geothermal resources would compete very effectively with other technologies if GHG reduction factors were used to determine RES compliance. For instance, geothermal base load resource capacity could be used to displace heavy-GHG emitting electricity sources such as out of state coal power plants. This approach could potentially lead to a very high "*value added*" factor for expanding geothermal energy delivery to California. As the Outline points out, the goal is to create "*an incremental incentive to select the least GHG intensive resource.*" In our case, demonstrating that geothermal energy development in California that directly displaced out of state coal-energy delivery could clearly illustrate how the RES was leading to major reductions in GHG emissions for California.

- **RES Compliance Credits**

The Outline proposes that "*RES compliance credits (whether based on a percent generation or GHG metric) that exceed a regulated party's obligation for a compliance period, could be used for future compliance periods or traded with other regulated parties.*" GEA is concerned that this proposal could actually undermine the goals of AB 32, create another complicated "*credit*" trading scheme and create disincentives for "*regulated parties*" to actually stimulate market demand for new renewable energy projects.

- **Other Technologies and Changes in Load**

GEA does not believe that deployment of other technologies promoted in the AB 32 Scoping Plan (such as rooftop PV and CHP systems) should reduce the RES obligation for regulated parties just because these technologies reduce a regulated party's load.

Additionally, staff seeks comments on the concept of excluding future load deliveries to plug-in hybrid vehicles from the RES obligation. GEA strongly believes that if one of the goals of the AB 32 Scoping Plan is to move towards "*electrifying*" the transportation system, and move away from an over-dependence on fossil fuels, then we want to encourage the greenest and cleanest electricity grid possible. If load increases due to widespread deployment of plug-in hybrids or other electric vehicles, that policy choice and market decision only makes sense if we have gone to a 33% RES and beyond. In

other words, this is a good reason for load increases, and it should be accounted for and recognized as part of the 33% RES obligation.

**GEA Requests a Meeting with CARB Staff to Discuss “Cross-Cutting” Issues for the Geothermal Industry**

Again, GEA thanks CARB for the opportunity to comment on the Concept Outline for the RES Program. We are interested in arranging a meeting with CARB staff to discuss our comments, and to have a more broad-ranging discussion on issues unique to the geothermal industry for the RPS/RES program, and how we can help the state achieve the AB 32 Scoping Plan objectives. We will continue to monitor your public workshop and hearing process for the RES Program, and we will follow up with your staff to arrange a specific meeting time. At that meeting, we would bring in technical experts from our industry to meet with CARB staff.

Please contact me at (202) 454-5264 or via email at [karl@geo-energy.org](mailto:karl@geo-energy.org) or our Western States Representative John McCaull at (530) 997-7586 or [john@geo-energy.org](mailto:john@geo-energy.org) if you have any further questions.

Sincerely,

Karl Gawell  
Executive Director

John McCaull  
Western States Representative